

Work Order ID 134874

Wednesday, July 22, 2015 4:14:33 PM

134874

Page 1

Item ID: D4148-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Crosstube Lug Plate, Fwd
 Start Date: 7/22/15 Start Qty: 10.00 ***10*** Cust Item ID:
 Required Date: 7/22/15 Req'd Qty: 10.00 ***10*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: JUL 23 2015 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4148	E								

100 0.00

100

Waterjet
FLOW CNC Waterjet

Memo

Cut as per dwg D4148
 Prog Rev: E
 Dwg Rev: E

OPEN HOLES TO SIZE AS PER DWG

Deburr as required

0.00

(10)

0215/08/24

110 QC2- Inspect parts off machine FAI/FAIB 0.00

110

QC
Quality Control

Memo

0.00

(10)

0215/08/24

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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134874

Page 2

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 7/22/15 **Start Qty:** 10.00 ***10***

Cust Item ID:

Required Date: 7/22/15 **Req'd Qty:** 10.00 ***10***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

[illegible]

150	Identify as per dwg & Stock Location: <u>ST 099</u>	0.00
150		
Packaging	Memo	0.00
Packaging		

AUG 26 2015

160	QC21- Final Inspection - Work Order Release	0.00
160		
QC	Memo	0.00
Quality Control		

AUG 27 2015

SV 2015082

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
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Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, July 22, 2015 4:14:32 PM

Page 1

Work Order ID: 134874

134874

Parent Item: D4148-1

D4148-1

Parent Item Name: Crosstube Lug Plate, Fwd

Start Date: 7/22/15

Required Date: 7/22/15

Start Qty: 10.00

Required Qty: 10.00

Comments:

IPP Rev:A 10.06.24 new issue DD verf:EC

IPP Rev:B 10.10.29 as per revC DD verf:EC

11.03.02 AS PER DWG REV.D DD VERF:EC

IPP REV:C

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S11GA		Purchased	No			100	sf	130.8257	0.3607	3.796842			

M304S11GA

304/316 0.125 Sheet

0215/08/29

Location

Loc Qty

Loc Code

MAT020

130.8257

122521

40.034

M128254

55.8

M129545

25.075

M129972

9.9167

3.5

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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DART AEROSPACE LTD		Work Order:	134874
Description: Fwd Crosstube Lug Plate		Part Number:	D4148-1
Inspection Dwg: D4148	Rev: E	Page 1 of 1	

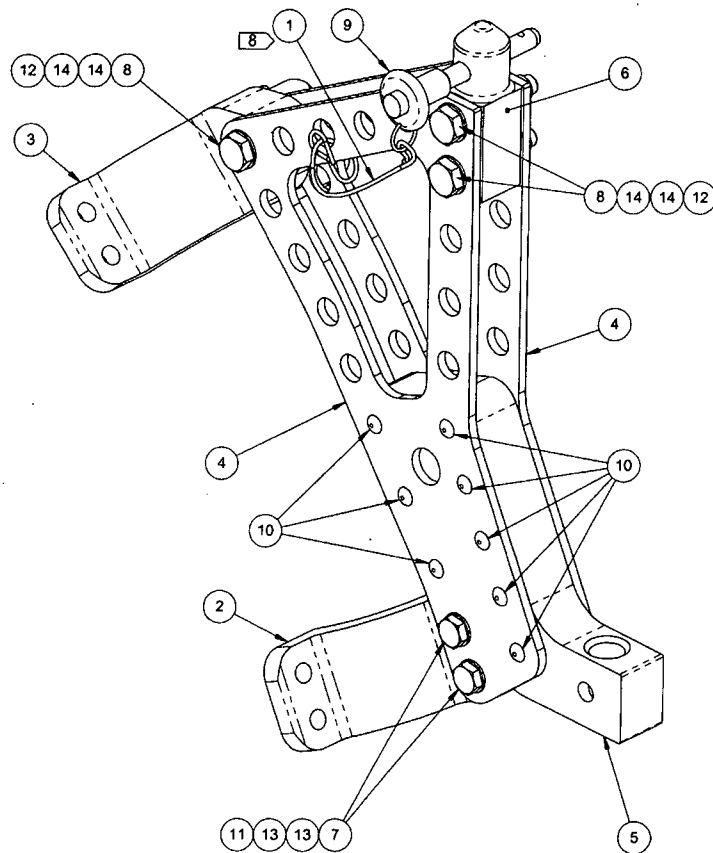
FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.129	+0.005/-0.001	Ø. 128	/		Vz Dc - 01	
Ø0.191	+0.005/-0.001	Ø. 191	/		Vz Dc - 02	
Ø0.38	+0.006/-0.001	Ø. 379	/			
Ø0.257	+0.006/-0.001	Ø. 257	/			
Ø0.50	+0.008/-0.001	Ø. 499	/			
0.94	+/-0.030	.94	/			
4.47	+/-0.030	4.47	/			
0.750	+/-0.010	.750	/			
8.47	+/-0.030	8.47	/			
8.096	+/-0.010	8.096	/			
5.43	+/-0.030	5.43	/			
5.197	+/-0.010	5.197	/			
4.733	+/-0.010	4.735	/			
0.310	+/-0.010	.311	/			
0.750	+/-0.010	.757	/			
0.375	+/-0.010	.377	/			
1.84	+/-0.030	1.84	/			
0.92	+/-0.030	.92	/			
3.000	+/-0.010	3.002	/			
0.750	+/-0.010	.754	/			
0.625	+/-0.010	.628	/			
1.982	+/-0.010	1.985	/			
0.991	+/-0.010	.993	/			
0.77	+/-0.030	.77	/			
1.54	+/-0.030	1.543	/			
2.47	+/-0.030	2.472	/			
0.82	+/-0.030	.82	/			
3.57	+/-0.030	3.57	/			
1.23	+/-0.030	1.23	/			
0.73	+/-0.030	.73	/			
0.125	+/-0.010	.127	/			
Ø0.252	+0.003/-0.000	Ø. 252	/			

Measured by:	Dc	Audited by:	DAS 38	Preliminary Approval:	
Date:	15/08/24	Date:	9-89 AUG 26 2015	Date:	

Rev	Date	Change	Revised by	Approved
A	10.08.04	New Issue	KJ	
B	10.10.08	Dwg Rev updated	KJ	
C	10.11.05	Dimensions updated per Dwg Rev C	KJ	
D	11.03.08	Dwg Rev updated	KJ	
E	12.02.01	Dimensions updated per Dwg Rev D	KJ	
F	13.11.26	Dwg Rev updated	KJ	

8 7 6 5 4 3 2 1



D4148-041 FWD X-TUBE LUG ASSY

- NOTES:
 1) MATERIAL: N/A
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: N/A
 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4148-041" PER DART QSI 044 6.1
 7) WEIGHT: 3.66 lbs
 8) ATTACH D2690-6 TO D4148-1 BY LOOPING AROUND A LIGHTENING HOLE FIRST AND THEN SECURE TO MS17984-C413

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4148-041	FWD X-TUBE LUG ASSY
1	1	D2690-6	LANYARD
2	1	D3910-1	X-TUBE LUG
3	1	D4091-1	MOUNTING LUG
4	2	D4148-1	FWD X-TUBE LUG PLATE
5	1	D4148-3	STUD RECEIVER LOWER
6	1	D4148-5	EYEBOLT STUD
7	2	AN3C12A	BOLT
8	3	AN4C13A	BOLT
9	1	MS17984-C413	PIN, QUICK RELEASE
10	8	MS20615-4M18	RIVET, SOLID, PAN-HEAD
11	2	MS21043C3	NUT, SELF-LOCKING
12	3	MS21043C4	NUT, SELF-LOCKING
13	4	NAS1149C0332R	WASHER
14	6	NAS1149C0432R	WASHER

134 874 M19
15-07-23

RELEASED
2013-08-16
MP

E	B6-4 Ø0.266 HOLE ADDED FOR CARGO TUBE INSTALLATIONS.	AJS	13.07.22
D	HOLE DIA CHANGED TO 0.252" (D6-3); HOLE DIA CHANGED TO 0.250" (C8-5); REPLACED QTY(2) AN3C12A, MS21043C3 AND QTY(4) NAS1149C0332R WITH QTY(2) AN4C13A, MS21043C4 AND QTY(4) NAS1149C0432R (D3-1,C4-2)	SC	11.02.22
C	REDESIGNED D4148-1/-3 TO ADDRESS COMPATIBILITY ISSUES WITH D350-591 SHORT STEPS	MB	10.10.12
B	REPLACED QTY(3) MS20615-4M18 WITH QTY(2) EACH AN3C12A, MS21043-3 AND QTY(4) NAS1149C0332R WASHER (ZN D3-1, B7-2 & B4-2); MS20615-4M18 WAS MS20615-4M20 (ZN D3-1 & B7-2); Ø0.191 2 PL REPLACES Ø0.129 3 PL (ZN D6-3); Ø0.129 7 PL WAS 10 PL (ZN A7-3); Ø0.191 WAS 0.129 (ZN C8-5). REASON: SEE TR-D350-607-2 REV. B.	MB	10.07.05
A	NEW ISSUE	MB	10.06.18
REV.	DESCRIPTION	BY	DATE
DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D4148	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		FWD X-TUBE LUG ASSY	NTS
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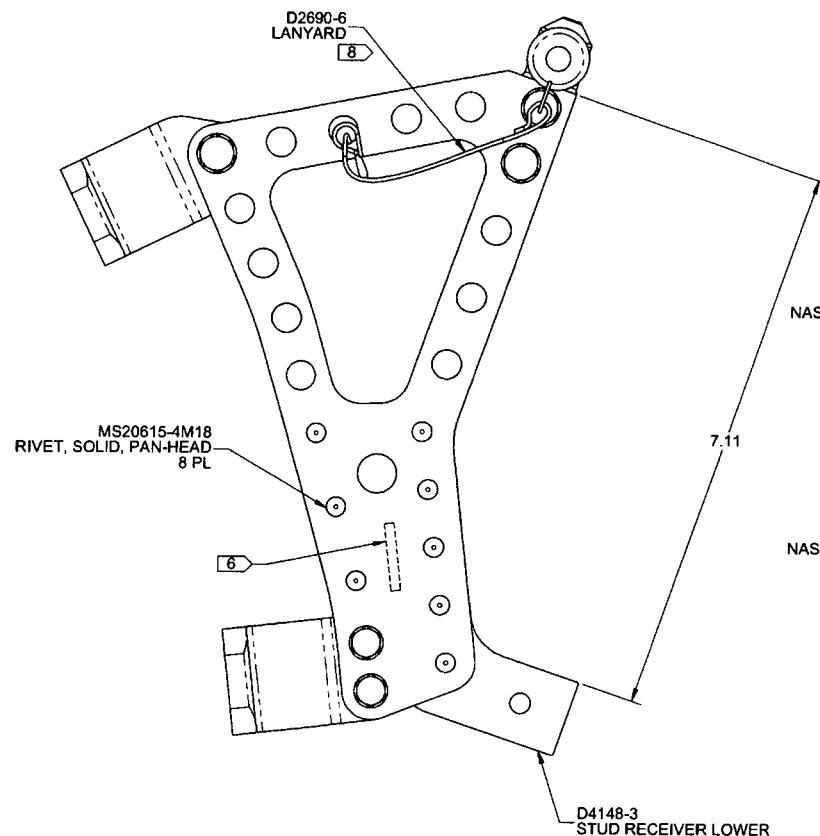
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D

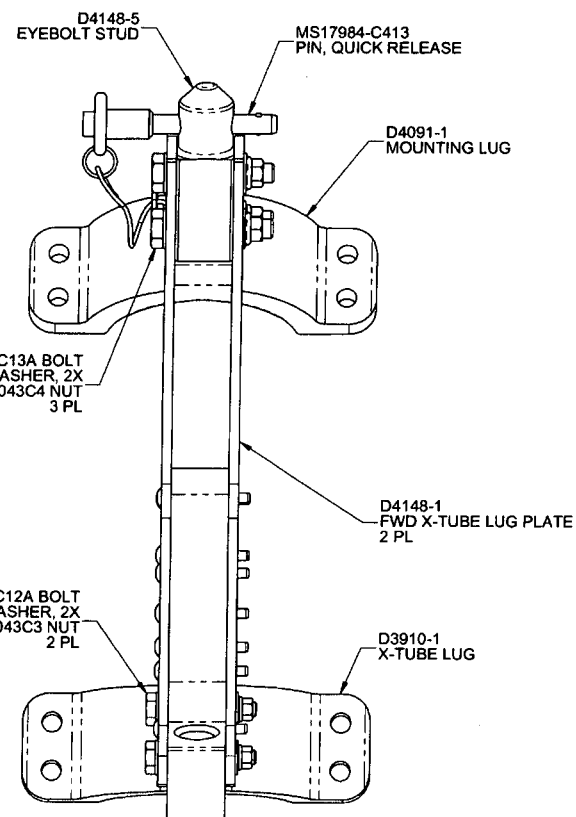
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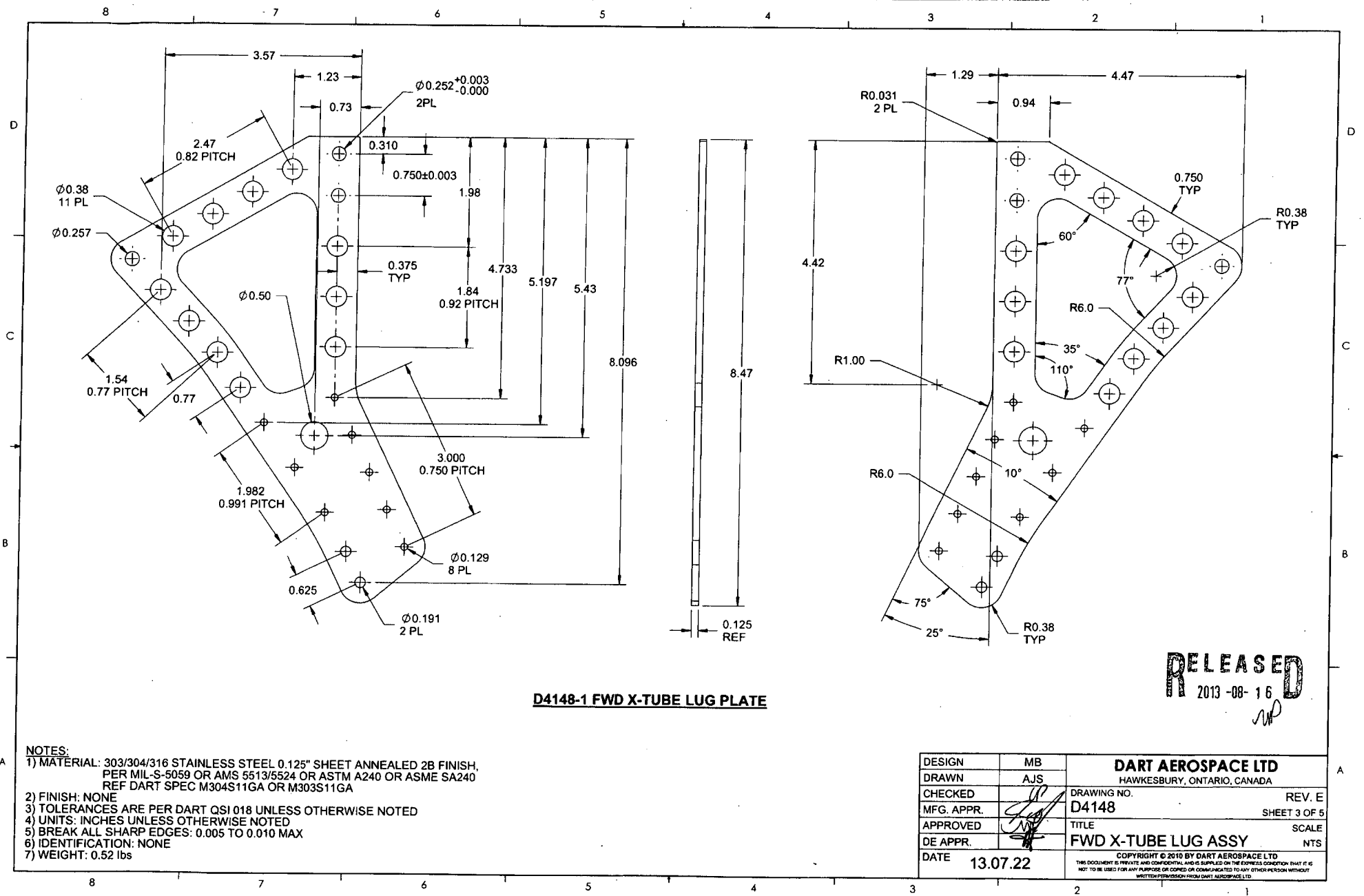
D4148-041 FWD X-TUBE LUG ASSY



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2013-08-16
nd

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>[Signature]</i>	D4148	SHEET 2 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FWD X-TUBE LUG ASSY	NTS
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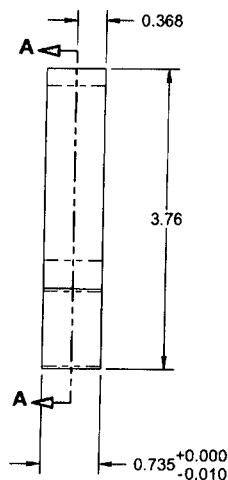
8 7 6 5 4 3 2 1



NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL 0.125" SHEET ANNEALED 2B FINISH, PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240 REF DART SPEC M304S11GA OR M303S11GA
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.52 lbs

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MFG. APPR.			SHEET 3 OF 5
APPROVED		TITLE	SCALE
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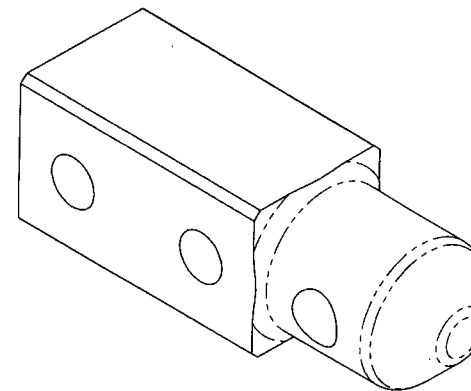
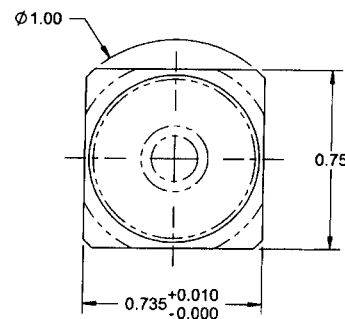
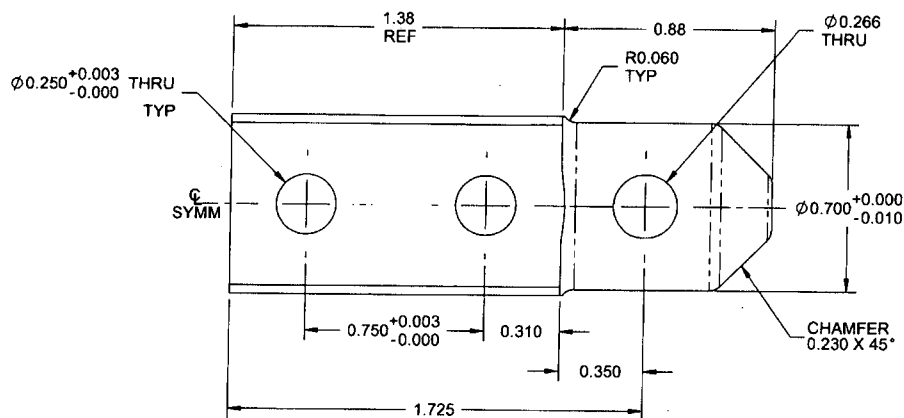
Technical drawing of a mechanical part, likely a bracket or plate, showing dimensions and tolerances. The part has a complex shape with a curved top edge and a rectangular base. Key dimensions include:

- Overall width: 4.65
- Overall height: 0.89
- Base thickness: 0.06 X 45° CMF
- Various radii: R0.031, R0.38 TYP, R6.0
- Holes: $\varnothing 0.453^{+0.010}_{-0.000}$ and $\varnothing 0.250$
- Angles: 65°, 90°, and 6°
- Cross-hatched area on the right side.

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NOTES:
1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A582 OR ASTM A276
REF DART SPEC M304B OR M303B
2) FINISH: NONE
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 1.51 lbs

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D4148-5 EYEBOLT STUD

NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A582 OR ASTM A276
REF DART SPEC M304B OR M303B
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.27 lbs

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